### REGIONAL FOCAL AREAS

A total of 93 Tier I aquatic Focal Areas and 55 Tier I terrestrial Focal Areas were identified. The top 13 aquatic and top 14 terrestrial (<u>Figure 21</u>) are discussed in detail in separate sections in the following pages.

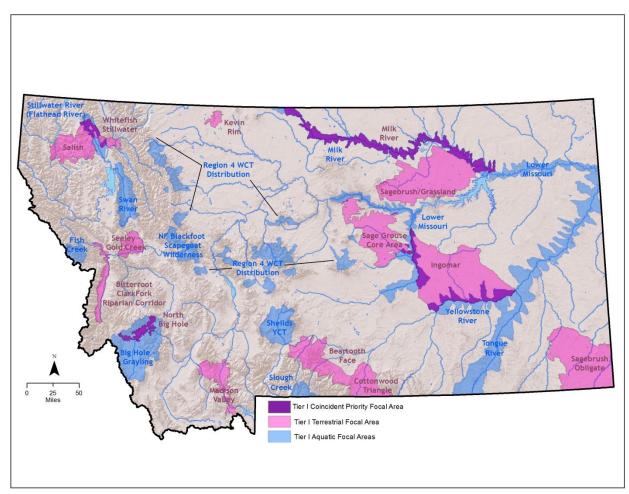


Figure 21. Top Tier I aquatic and terrestrial Focal Areas

### AQUATIC REGIONAL FOCAL AREAS

A total of 93 Tier I and 164 Tier II aquatic Focal Areas were identified. These ranged in size from a small mountain stream to the entire length of a major river. The larger Focal Areas were generally found in eastern Montana, where many SGCN were found in the same water body. The approach to identify aquatic Focal Areas in western Montana was different, as multiple SGCN ranges generally did not overlap. Many western Focal Areas were identified using a single species approach instead of the multi-species approach in the east. Therefore, large, single-system Focal Areas were identified in the east, and smaller Focal Areas in the west.

FWP staff further refined the Tier I Focal Areas by ranking them and identifying the top two within each FWP region. Regions 4 and 5 combined one Focal Area, resulting in a total of 13 aquatic Focal Areas being represented in this section (Figure 22). The remaining Tier I and Tier II Focal Areas can be found in Appendices J-K. Examples of conservation actions that may be implemented in these Focal Areas can be found under the associated CTGCN and SGCN specific pages. The listed conservation actions, while thorough, may not represent all actions that should be implemented within each Focal Area. Listed actions should be reviewed prior to a project being implemented to determine relevancy to the project goals. Additional actions should be explored and implemented if they benefit the Focal Area, CTGCN, and/or SGCN.

While these areas were identified to focus conservation efforts, it is not implied that efforts only be restricted to these 13 areas. Implementing conservation actions in any Tier I or Tier II Focal Area has tremendous conservation value for Montana.

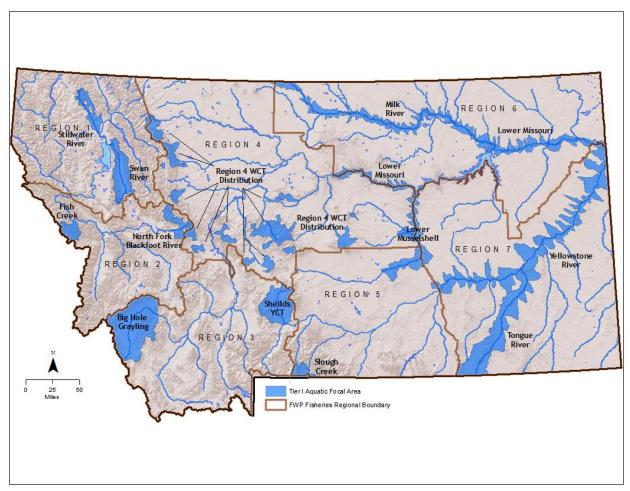


Figure 22. Top 13 Aquatic Focal Areas

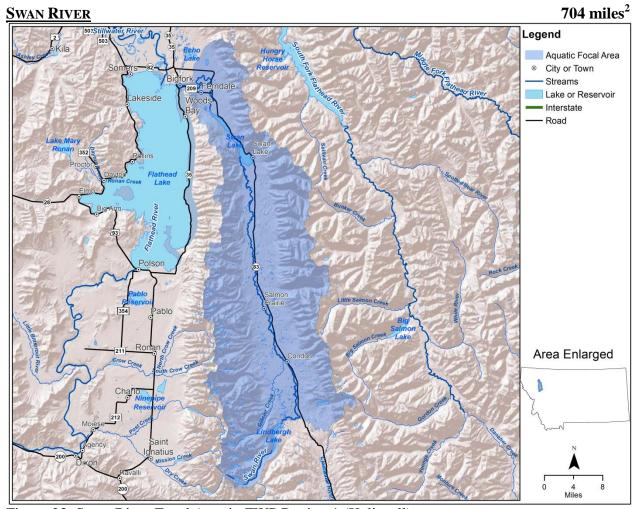


Figure 23. Swan River Focal Area in FWP Region 1 (Kalispell)

The Swan River Focal Area is unique in the western part of Montana, in that it supports several SGCNs in one system. There are several agencies and organizations working together in this Focal Area, including, FWP, DNRC, USFS, USFWS, The Nature Conservancy, Trust for Public Land, Confederated Salish and Kootenai Tribes, Montana State University, U.S. Geological Survey, and Trout Unlimited. In addition, there are existing protections including conservation easements. There is moderate recreational value in the area, including angling for rainbow and WCT in the Swan River and catch and release for bull trout in Swan Lake. Popular fisheries for kokanee salmon and northern pike also exist in Swan Lake.

Current impacts include road and subdivision development, incompatible timber harvest practices, and non-native species (i.e., lake trout, brook trout, northern pike) in Swan Lake. Future threats are the same.

<u>Associated CTGCN</u> Intermountain Valley River Mountain Stream

# **Associated SGCN**

Bull Trout Pygmy Whitefish Westslope Cutthroat Trout

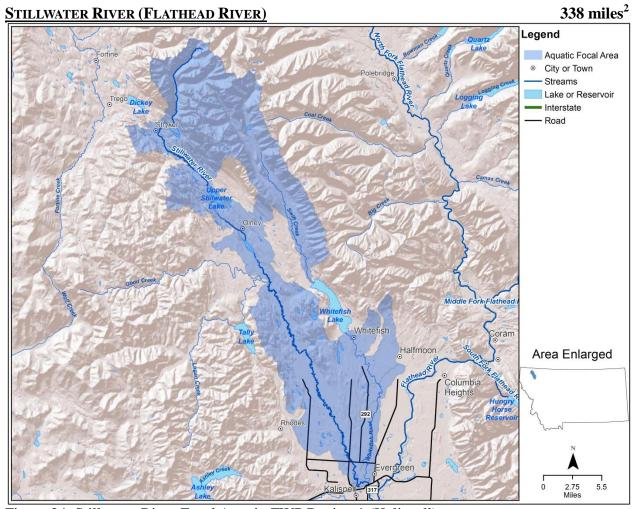


Figure 24. Stillwater River Focal Area in FWP Region 1 (Kalispell)

DNRC, USFS, and FWP have existing successful partnerships in this Focal Area. There are opportunities to improve connectivity with culvert and road improvements. There is moderate recreational value in the area, including fishing for native WCT as well as non-native salmonids. Lakes in the Stillwater drainage also provide diverse angling opportunities for non-native fishes.

Current impacts include road development, incompatible timber harvest practices, and competition from non-native species (i.e., lake trout, brook trout). Future threats will remain the same if action is not taken.

# **Associated CTGCN**

Intermountain Valley River Mountain Stream

# **Associated SGCN**

Bull Trout Westslope Cutthroat Trout

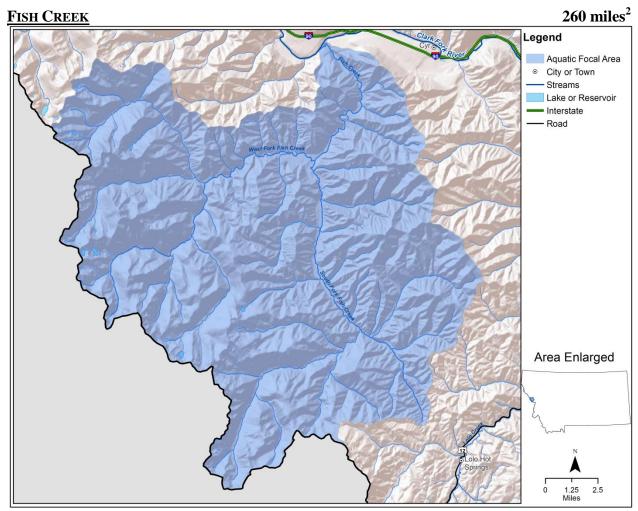


Figure 25. Fish Creek Focal Area in FWP Region 2 (Missoula)

Bull trout and WCT are found throughout this Focal Area and both have high conservation value. This area includes spawning and rearing areas and is an important recruitment source for the Clark Fork River. Current projects include partnerships between FWP, USFS, DNRC, Trout Unlimited, and others. Most of the upper watershed is within a proposed wilderness area and many stream crossings have been improved for fish passage. There are large roadless tracts and many roads have been decommissioned. Lower portions of the drainage have recently been purchased by FWP and now make up the Fish Creek WMA and State Park. Several key undeveloped, private in-holdings within this area are a priority for acquisition and protection. There is more opportunity for additional road decommissioning, fish passage improvements, and riparian and upland restoration. This is a high quality native trout fishery on the lower mainstem.

Current impacts include road and timber harvest impacts, riparian encroachment, competition and hybridization with non-native fish, and fish passage barriers. Future threats include riparian encroachment, large increases in fishing pressure, expansion by non-native fish, and impacts from further development.

<u>Associated CTGCN</u> Intermountain Valley River Mountain Stream

Associated SGCN
Bull Trout Westslope Cutthroat Trout

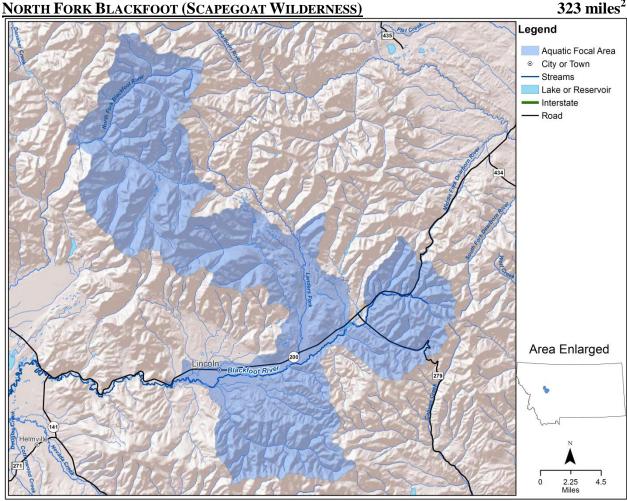


Figure 26. North Fork Blackfoot (Scapegoat Wilderness) Focal Area in FWP Region 2 (Missoula)

Bull trout and WCT are found within this Focal Area and both have high conservation value. The lower North Fork supports the largest fluvial bull trout run in Montana. The majority of the drainage is within designated Wilderness and provides recruitment for the Blackfoot River. Some areas already support pure WCT and investigations have begun regarding replacing hybrid rainbow trout with pure WCT and possibly introducing bull trout into upper portions of the watershed. This area supports excellent mountain lake fisheries and the possibility of enhanced WCT fishery in a restored stream system.

The primary impact to this Focal Area is the introduction of non-native rainbow trout. Future threats are minimal as nearly all of the area falls within a designated Wilderness Area.

# **Associated CTGCN**

Intermountain Valley River Mountain Stream

# **Associated SGCN**

Bull Trout Westslope Cutthroat Trout

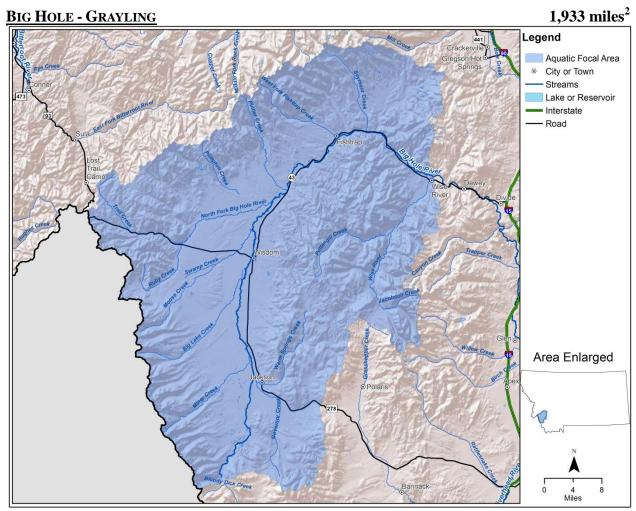


Figure 27. Big Hole – Grayling Focal Area in FWP Region 3 (Bozeman)

This area is core habitat for Arctic grayling and is a demonstration area with a successful Candidate Conservation Agreement with Assurances (CCAA). Successful partnerships with organizations and landowners have been occurring for over 20 years and have demonstrated how groups can come together to conserve water and restore riparian habitat. The ongoing CCAA will continue to work towards riparian habitat restoration and improving flows. This Focal Area is protected by a designated Wilderness Area in the headwaters and by the CCAA on private lands. There is some recreational use in this Focal Area.

Current impacts include habitat alteration, dewatering, and barriers to fish passage. Future threats include continued habitat alteration and dewatering, persistence of fish barriers, and climate change impacts on temperature and precipitation timing and amount.

# **Associated CTGCN**

Intermountain Valley River Mountain Stream

Associated SGCN
Arctic Grayling Lake Trout Western Pearlshell Westslope Cutthroat Trout

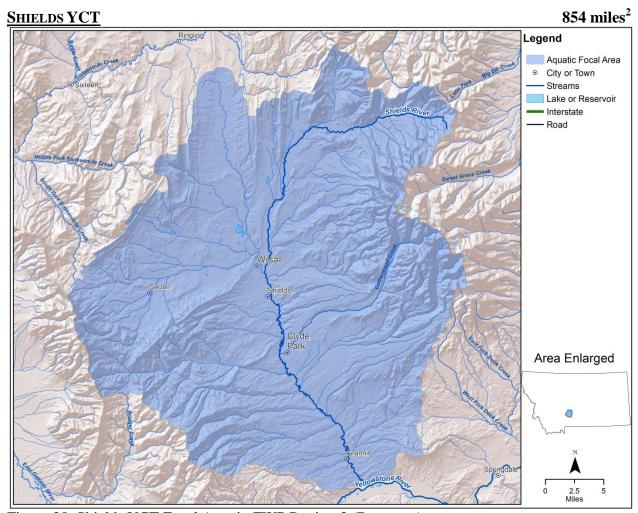


Figure 28. Shields YCT Focal Area in FWP Region 3 (Bozeman)

This area has the best connected YCT population in the Yellowstone River basin and is a core conservation area for YCT. There is a very active watershed group in this Focal Area, as well as existing partnerships between agencies and organizations such as the Park County Conservation District, Shields Valley Watershed Group, the Wildlife Conservation Society, USFS, U.S. Geological Survey, and Trout Unlimited. There is potential for downstream expansion for YCT found in the headwaters. A complete fish passage barrier was completed in 2013 that will secure most of the basin from further invasion of non-native rainbow trout. Recreational use is low in this area.

Current impacts include competition with non-native species, dewatering, development, and incompatible grazing practices. Future threats include expansion of non-native competitors, continued dewatering and incompatible grazing practices, potential gas development, and climate change impacts on temperature and precipitation timing and amount.

Associated CTGCN
Intermountain Valley River Intermountain Valley Stream Mountain Stream

Associated SGCN
Yellowstone Cutthroat Trout

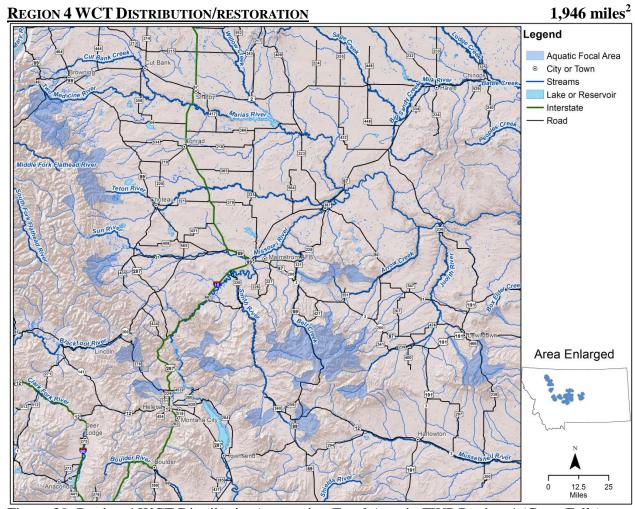


Figure 29. Region 4 WCT Distribution/restoration Focal Area in FWP Region 4 (Great Falls)

This Focal Area is spread across a large area and includes mostly intact habitat throughout the entire range of the WCT conservation population within Region 4. Northern redbelly dace are also found within portions of this Focal Area.

Because this area is spread throughout the Region, impacts, values, partnerships, etc. vary between populations and makes working in this Focal Area challenging. However, partnerships are generally good across this area and include federal and state agencies, Tribal government, NGOs, and private landowners. The protections vary from none (e.g., private land) to significant (Beartooth WMA). The opportunity for restoration varies, but many populations currently are expanding and there is much potential for continued expansion across this Focal Area. Though angler use is not consistent throughout, the area does receive high use and tends to be a popular native sport fish fishery.

Current impacts include dewatering, competition with non-native species, mining impacts, water temperature changes, and incompatible grazing practices. Future threats include continued dewatering, mining, increases in water temperature, and incompatible grazing practices;

hybridization with non-native species; catastrophic events (e.g., fire) causing extirpation of small populations; and climate change impacts on temperature and precipitation timing and amount.

# **Associated CTGCN**

Intermountain Valley River
Intermountain Valley Stream
Mountain Stream
Prairie River
Prairie Stream

# **Associated SGCN**

Northern Redbelly Dace Westslope Cutthroat Trout

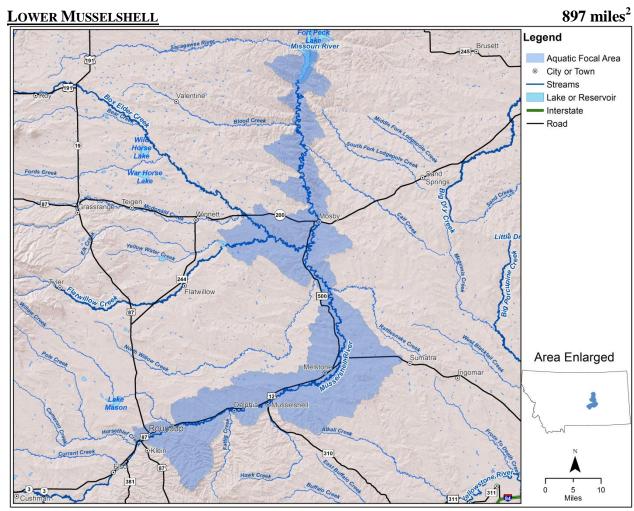


Figure 30. Lower Musselshell Focal Area in FWP Regions 4 and 5 (Great Falls and Billings)

There are several SGCN found within this Focal Area as are many game fish. However, some native species have likely been extirpated from this watershed as well as a historic sauger run. The Musselshell Water Coalition and other watershed groups are working together and are considering sauger reintroduction. Restoration is possible, but the cost may be high and effort extensive. While there is some recreational use of this area, it is not widespread.

The impacts to this Focal Area are severe and the entire fisheries community is at risk due to dewatering and there is limited protection to instream flows. Other current impacts are loss of connectivity (extensive), riparian degradation, and some grazing impacts. Future threats include additional dams and other barriers, ANS, continued dewatering and riparian degradation, incompatible grazing practices, and climate change impacts on temperature and precipitation timing and amount.

### **Associated CTGCN**

Prairie River Prairie Stream

Associated SGCN
Blue Sucker Northern Redbelly Dace Northern Redbelly x Finescale Dace Sauger

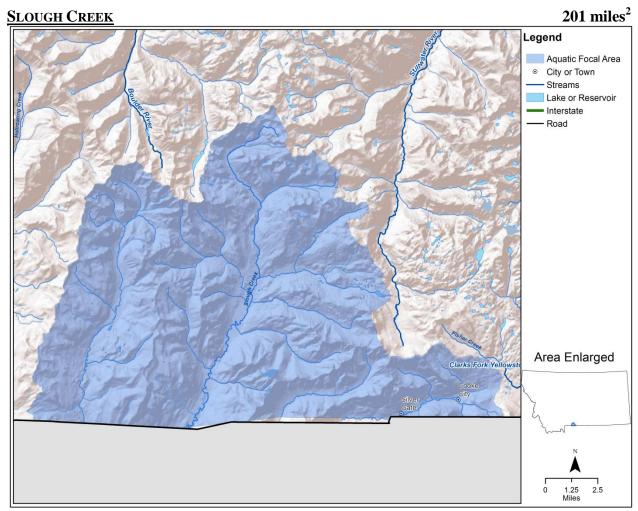


Figure 31. Slough Creek Focal Area in FWP Region 5 (Billings)

This Focal Area is upstream from Yellowstone National Park (YNP) and harbors an aboriginal population of YCT. The activities that occur in this area will greatly influence the success of YCT restoration in Yellowstone. Many partners, including NGOs, and state and federal agencies, are working together to maintain this fishery. YNP and a USFS Wilderness Area afford this Focal Area some protections. The recreational value for this area is high as most areas are open to harvest and all are open to catch and release.

Current impacts to this Focal Area mainly come from non-native (i.e., brook trout, rainbow trout) competition with YCT. Future threats are the same if not managed.

# **Associated CTGCN**

Mountain Stream

# **Associated SGCN**

Yellowstone Cutthroat Trout

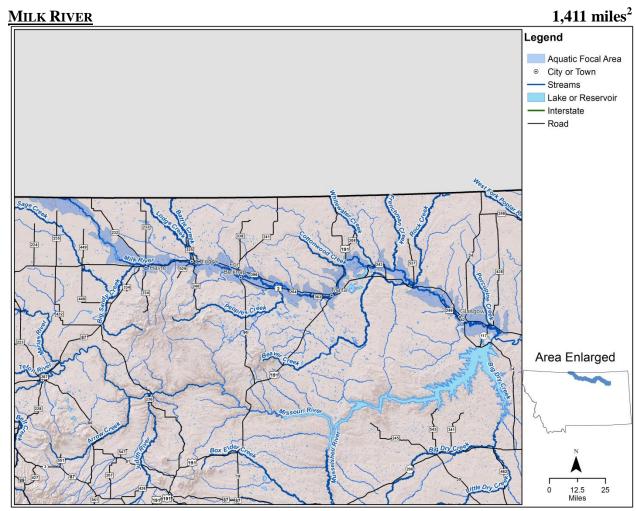


Figure 32. Milk River Focal Area in FWP Region 6 (Glasgow)

The Milk River is one of the areas in the state with the highest diversity of aquatic SGCN and game fish. The upper portion of the river does not have fish barriers, and riparian and instream habitat are in good condition.

The lower portion of the Milk River downstream of Vandalia Dam has a fish assemblage that is highly interconnected to the Missouri River and is high in native and non-native species richness. The abundance of both native and non-native fish can vary greatly on a seasonal or annual basis depending on the river's discharge and the number of fish migrating upstream from the Missouri River. The lower Milk River serves as a spawning ground for several large bodied Missouri River fishes, including several SGCN. The lower portion also contributes sediment and warm water to the Missouri River, which has been shown to increase production of fishes spawning in the Missouri. The middle and lower portion of the Milk River has a very active recreational fishery for native and non-native fish species.

Though the upper portion is in good condition, it still is impacted by irrigation withdrawals and incompatible grazing practices. The future threats are the same in this area if there is no

intervention. The middle and lower Milk River is heavily impacted by many fish barriers that eliminate fish migration on normal and low water years. The Vandalia Dam is a complete barrier to fish migration. Other current impacts to the middle and lower sections include irrigation withdrawals and off stream reservoirs, and development along the riparian corridor. Future threats to the lower portion include a high potential for oil and gas development, continued housing development along the corridor, and climate change impacts on temperature and precipitation timing and amount.

# **Associated CTGCN**

Prairie River Prairie Stream

# **Associated SGCN**

Sturgeon Chub

Blue Sucker
Iowa Darter
Northern Redbelly Dace
Northern Redbelly x Finescale Dace
Paddlefish
Pallid Sturgeon
Pearl Dace
Sauger
Shortnose Gar
Sicklefin Chub

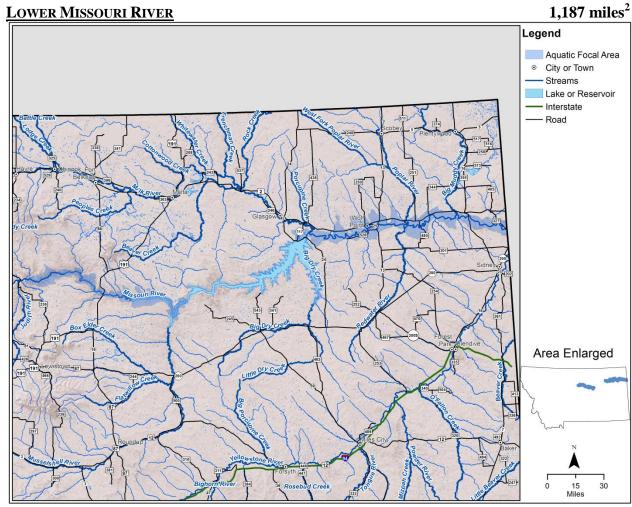


Figure 33. Lower Missouri River Focal Area in FWP Regions 4 and 6 (Great Falls and Glasgow)

The section of the Missouri River upstream of Fort Peck Dam is one of the more unaltered sections of the Missouri River and has a very high diversity of SGCN and game fish. It is a high quality habitat with a near natural hydrograph, sediment, and temperature regime. It provides spawning and rearing habitat for many Fort Peck Reservoir fishes, including several SGCN and the endangered pallid sturgeon. FWP and USFWS are partnered in this area, and the Wild and Scenic River designations offer some protections. This portion of the Missouri harbors an important paddlefish population with high angler interest.

In contrast to upstream of Fort Peck Dam, the downstream section has been severely altered. Fort Peck Reservoir acts as both a sediment and nutrient sink for the Missouri River, and therefore delivers sediment free and nutrient poor water to the Missouri River downstream of the dam. The dam prevents all fish from migrating upstream and has greatly altered the natural flow regime of the Missouri River by holding back spring freshets and discharging higher than natural flows during the winter months. There have been very few channel forming flows since the dam closed off the river in 1937. The water that the dam uses for power generation comes from the bottom of Fort Peck Reservoir, which is cold year round. During the spring and summer months this colder

water greatly reduces the water temperature of the Missouri River for approximately 180 river miles. Although water temperature does rise as it goes downstream, on average the water temperatures in the lower Missouri River near its confluence with the Yellowstone River are two degrees Fahrenheit colder than water upstream of Fort Peck Reservoir.

The altered habitat of the Missouri River due to Fort Peck Dam, is evident in the absence as well as the reduction in relative abundance of many native fishes. Several species such as sturgeon and sicklefin chubs, western silvery minnows, channel catfish, and stonecats become more abundant the further downstream you go from Fort Peck Dam. Additionally, the growth rates of fishes like sauger, channel catfish, and pallid sturgeon are slower in the Missouri River near Fort Peck Dam when compared to the Missouri River upstream of the dam or the Yellowstone River. For some species water temperatures may be too cold to meet their minimum spawning requirements.

Current impacts to this Focal Area include ANS, incompatible grazing practices, and oil and gas development. The bigger impacts are associated with water management: upstream dams, reservoir elevations, altered temperature regime, and water withdrawals. Future threats are the same as current impacts if there are no management changes.

# **Associated CTGCN**

Mixed System Prairie River Prairie Stream

### **Associated SGCN**

Blue Sucker
Iowa Darter
Northern Redbelly Dace
Northern Redbelly x Finescale Dace
Paddlefish
Pallid Sturgeon
Pearl Dace
Sauger
Shortnose Gar
Sicklefin Chub
Sturgeon Chub

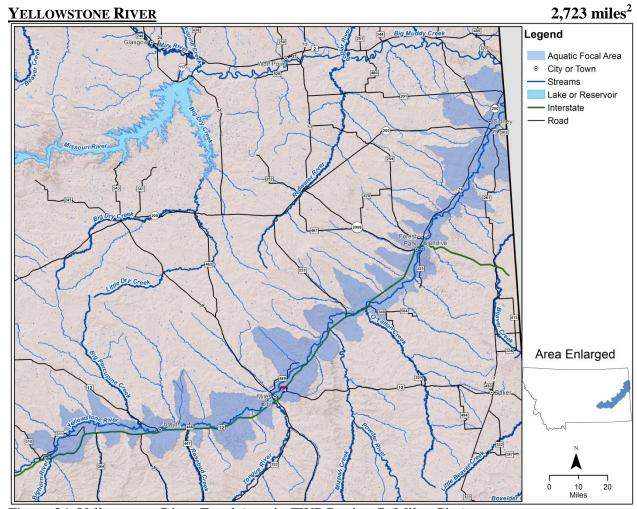


Figure 34. Yellowstone River Focal Area in FWP Region 7 (Miles City)

The Yellowstone River mainstem is home for many aquatic SGCN, native species, and a great diversity of game fish. It is an important river for spawning by the federally endangered pallid sturgeon. It also is an important river for a spawning migration of paddlefish from Lake Sakakawea. The paddlefish migration creates a high angler interest. There are several partnerships in this area including local conservation districts, state and federal agencies, and occasionally individual landowners. The majority of this watershed is held in private ownership. This area is heavily used by anglers, hunters, wildlife watchers, and other river recreationists.

Coal and gas development is a current impact to this Focal Area. Dewatering, as it relates to instream flow and fish habitat, and fish passage at multiple low head diversion dams, are other issues for the Focal Area. The future threats remain the same as current impacts if they are not addressed.

# Associated CTGCN Mixed System

Mixed System Prairie River Prairie Stream

# **Associated SGCN**

Blue Sucker
Iowa Darter
Northern Redbelly Dace
Paddlefish
Pallid Sturgeon
Sauger
Shortnose Gar
Sicklefin Chub
Sturgeon Chub

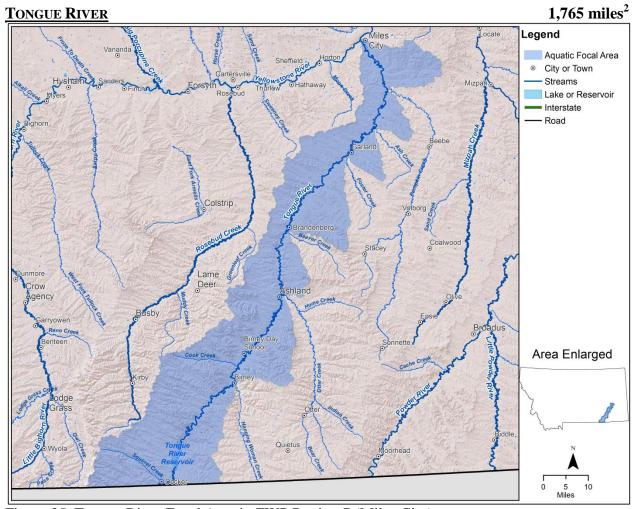


Figure 35. Tongue River Focal Area in FWP Region 7 (Miles City)

The Tongue River has a high diversity of game fish and is an important spawning tributary for numerous native fish, including several SGCN. Connectivity between the Tongue and Yellowstone systems and associated tributaries is important for long term persistence of fish assemblages.

There are several partnerships in this area including local conservation districts, state and federal agencies, and occasionally individual landowners. The majority of this watershed is held in private ownership. This area is heavily used by anglers, hunters, wildlife watchers, and other river recreationists.

Coal and gas development is a current impact to this Focal Area. Other impacts include dewatering as it relates to instream flow, fish habitat, and water rights. The future threats remain the same as current impacts if they are not addressed.

# Associated CTGCN Prairie River

Prairie Stream

# Associated SGCN Blue Sucker

Paddlefish Sauger Sturgeon Chub